

SUPPORT FOR THE AMENDMENT

The specification has been amended to address formalities identified in the Office Action. Additionally, language has been added to the specification which states that: "The use of the term "spring/suspension element" and "spring-suspension element" refers to an element which is capable of acting as both a spring element and a suspension element." Support for this language can be found in the specification on page 1 at lines 30-34, on page 4 at lines 12-37 and on page 5 at lines 1-6. No new matter has been added.

Claim 1 has been amended to remove the limitation that the torsion element is mounted in the chassis. No new matter has been added.

Claims 1-4, 6 and 7 have been amended to address formalities, some of which are cited in the Office Action. No new subject matter has been added.

Claim 2 was amended to further specify the relationship between the members of the spring-suspension element. Specifically, it is now specified that the spring-suspension elements are displaceable in a lengthwise direction in relation to each other. No new matter has been added. Support for the modified language can be found in the specification on page 4 at lines 12-37 and on page 5 at lines 1-6.

Claims 3 and 6 have been amended to specify that the spring-suspension elements define a "pressure chamber containing a gas." No new matter has been added. Support for the modified language can be found in the specification on page 4 at lines 12-37 and on page 5 at lines 1-6.

Entry of the amendment is requested. Upon entry, claims 1-7 are active in this application.

REMARKS

The Office Action mailed July 29, 2008 contains several formal objections and rejections in addition to two prior art rejections. Each objection and rejection will be discussed in turn.

Objections to the Drawings

In the Office Action, the drawings were objected regarding the torsion element being "in the chassis." Amended claim 1 does not include this limitation and this objection is therefore moot. Withdrawal of the objection is requested.

Objections to the Specification

In the Office Action, the specification was objected to for the use of the terms "axel" and "axels." These references have been changed to "axle" and "axles" respectively. Withdrawal of the objection is requested.

In the Office Action, the specification was objected to for being improperly arranged. The specification has been amended to include headings so as to address this objection. Withdrawal of the objection is requested.

Objections to the claims

In the Office Action, claims 1-3, 6 and 7 are objected to because of a number of informalities. Amended claims 1, 3, 6 and 7 have been amended accordingly. Withdrawal of the objection is requested.

35 U.S.C. § 112 Rejections

Claims 2 and 3 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter. Specifically, it is asserted that it is unclear what the spring/suspension elements are doing in a first direction in relation to each other. Claim 2 has been amended to state that the first and second spring-suspension elements are displaceable in a lengthwise direction in relation to each other. Withdrawal of the rejection is requested.

35 U.S.C. § 102(b) rejection over US Patent 5,540,454 to VanDenberg et al.

Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. § 102(b) as being anticipated by VanDenberg et al. The rejection is traversed.

Amended Claim 1 specifies a device for connecting a wheel axle housing with a chassis of a vehicle, comprising: a stabilizer having a rod shaped torsion element that is arranged such that it can rotate along its longitudinal axis; two first arms running in a crosswise direction in relation to the torsion element having first end portions that are rigidly attached to corresponding end portions of the torsion element; and two second arms having first end portions and second end portions, the first end portions being articulatedly attached to second end portions of the first arms, whereby the first and second arms extend at an angle in relation to the longitudinal axis of torsion element and whereby the second end portions of the second arms are connected to the wheel axle housing and extend essentially vertically up therefrom; and at least two spring-suspension elements with a first member that is operatively connected with the wheel axle housing, and a second member that is connected to the chassis, whereby members are arranged for reciprocal resilient movement and to transfer a portion of the chassis' weight to the wheel axle housing, wherein the spring-suspension elements have corresponding third arms having first end portions that are rigidly attached to the corresponding end portions of torsion element, and second end portions that are connected with the first member.

VanDenberg et al. is directed to a tag axle assembly which has the capability of raising and lowering a tire assembly 11. The tag axle assembly has a stationary support frame 14 to which a lower cross tube 17 is rigidly affixed. Pivotaly connected to the lower cross tube 17 are a pair of rocker beams 47 and actuator beams 87 via pivot brackets 45 and cap plates 94, respectively. The actuator beams are also pivotaly attached to a pair of tubular lift bars 83. The rocker beams 47 and the tubular lift bars are pivotaly attached to a pair of axle seats 62 which are rigidly attached to a pair of drop axles 78. The tag axle assembly raises and lowers the tire assembly 11 via a pair of linear actuators 98 which are pivotaly connected to the actuator beams 87 and stationary support frame 14.

Claim 1 is not anticipated by VanDenberg et al. for at least the reasons stated in the following paragraphs.

In the Office Action, it is asserted that lower cross tube 17 is the stabilizer having a rod shaped torsion element able to rotate about its longitudinal axis of claim 1. However, lower

cross tube 17 is instead a square tube which is rigidly secured to each hanger bracket 15 via weld brackets 28. Through this structure, lower cross tube 17 is mounted to stationary support frame 14. Lower cross tube 17 functions to provide a pivoting support for rocker beam 47 and actuator beam 87 via pivot pins 95 and 46 respectively. While it may be the case that a torque may be exerted on lower cross tube 17 via pivot pins 95 and 46 respectively, lower cross tube 17 is not able to rotate about a longitudinal axis because it is rigidly attached to the stationary support frame 14. Further, VanDenberg et al. makes no reference to lower cross tube 17 being rotatable or even serving as a torsion element; rather it is simply an element which enables the rocker beam 47 and actuator beam 87 to be pivotably connected to the stationary structure 14. For at least this reason, VanDenberg does not anticipate claim 1.

In the Office Action, it is also asserted that the rocker beams 47 of VanDenberg et al. form the two first arms specified in claim 1. However, claim 1 specifies that the two first arms be rigidly attached to corresponding end portions of the torsion element. Without conceding that lower cross tube 17 is the torsion element of claim 1, rocker beams 47 are neither rigidly nor pivotally connected to lower cross tube 17. Rather rocker beams 47 are pivotally attached to pivot brackets 45 which are rigidly attached to the lower cross tube 17. Further, note that pivot brackets 45 are not connected to the lower cross tube 17 at its ends and that claim 1 specifies that the first arms be attached at the ends of the torsion element. As such, no rigid connection is formed between lower cross tube 17 and rocker beams 47, as specified in claim 1. For at least this reason, VanDenberg does not anticipate claim 1.

The Office Action also asserts that the actuator beams 87 of VanDenberg et al. form the third arms of claim 1. Claim 1 specifies that the spring-suspension elements have third arms having first end portion that are rigidly attached to the torsion element and second end portions that are connected with first members of the spring-suspension element. Without conceding that lower cross tube 17 is the torsion element of claim 1, actuator beams 87 are neither rigidly nor pivotally connected to lower cross tube 17. Rather actuator beams 87 are pivotally attached to cap plates 94 which are rigidly attached to the lower cross tube 17. As such, no rigid connection is formed between lower cross tube 17 and actuator beams 87, as specified in claim 1. For at least this reason, VanDenberg does not anticipate claim 1.

For all of the foregoing reasons, claim 1 is not anticipated by VanDenberg et al. Because claims 2-7 ultimately depend from claim 1, they are not anticipated for at least the same reasons

stated in support of claim 1. Withdrawal of the rejection is requested. Further, and as discussed below, claims 1-7 are not rendered obvious by VanDenberg et al. because VanDenberg et al. provides no teaching, suggestion or motivation that would enable a person having ordinary skill in the art to arrive at the claimed invention.

35 U.S.C. § 103(a) rejection over Vandenberg et al. in view of French Patent FR 1 299 215

In the Office Action, claims 3, 6 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over VanDenberg et al. as applied to claims 1, 2, 4 and 5 and further in view of French Patent FR 1 299 215 ('215 patent). The rejection is traversed.

Neither VanDenberg et al., FR 1 299 215 nor a combination thereof render the claimed invention obvious because VanDenberg et al. and the '215 patent cannot be combined to teach the claimed invention. Specifically, neither VanDenberg et al. nor the '215 patent disclose a device for connecting a wheel axle housing with a vehicle chassis including a torsion element that is rotatable along its longitudinal axis to which two first arms and two third arms are rigidly attached.

In contrast to claim 1, VanDenberg et al. discloses a non-rotatable lower cross tube 17 which is rigidly attached to stationary structure 14 wherein actuator beams 87 and rocker beams 47 are pivotally attached to the lower cross tube 17 via cap plates 94 and pivot brackets 45, respectively. Further, one skilled in the art would not have modified Vandenberg et al. to arrive at the claimed invention because an inoperable result would occur thereby destroying the primary teaching of an operable tag axle assembly. For example, were lower cross tube 17 modified such that it was rod shaped and could rotate about its longitudinal axis, it would no longer be able to maintain the fixed location of pivot pins 46 and 95. Additionally, were actuator beams 87 and rocker beams 47 modified such that they were rigidly attached to lower cross tube 17, they would no longer be able to operate to change the position of the tire assembly 11. Further, because claim 1 specifies that both the first and second arms be rigidly attached the torsion element, the angle between the first and second arms is fixed such that they can exert a torque on the torsion element. This is the exact opposite of the relationship that rocker beams 47 and actuator beams 47 have with each other insofar as they must be able to move with respect to each other to operatively move the tire assembly 11.

With respect to the '215 patent, there is no further disclosure which resolves any of the stated deficiencies of Vandenberg et al. Instead, the '215 patent is directed to a pneumatic bellows type assembly mounted directly to a chassis and a related axle body. Further, the '215 patent does not disclose a channel that is arranged in one of the spring-suspension elements for the introduction of gas into the pressure chamber, as specified in claims 3 and 6. Rather, the '215 patent discloses only an embodiment wherein a connection piece 22 is provided for the introduction of hydraulic fluid into cylinder 8.

For at least the foregoing reasons, claim 1 is not rendered obvious by VanDenberg et al., FR 1 299 215 or a combination of both. Because claims 3, 6 and 7 ultimately depend from claim 1, they also are patentable for the reasons stated in support of claim 1, as are the other remaining dependent claims. Withdrawal of the rejection is requested.

SUMMARY

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.



Date: January 6, 2009

Respectfully submitted,

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A handwritten signature in dark ink, appearing to read 'Dennis R. Daley', written over a horizontal line.

Dennis R. Daley
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